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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/024,204	12/21/2001	Kazuhiko Isogawa	0754-0171P	4513

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EXAMINER

SHOSHO, CALLIE E

ART UNIT PAPER NUMBER

1714

DATE MAILED: 07/24/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/024,204	Applicant(s) ISOGAWA ET AL.	
	Examiner Callie E. Shosho	Art Unit 1714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on _____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☒ Claim(s) 1-7 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>12/21/03</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Fujii et al. (U.S. 5,929,140).

Fujii et al. disclose method of printing comprising a printing process using a composition, i.e. ink, comprising acrylic resin having a hydroxyl group, isocyanate crosslinking agent, β -diketone having boiling point between 130-160 C such as acetylacetone, and coloring agent containing metal such as metal powder and copper phthalocyanine, i.e. Phthalocyanine Blue (col.5, lines 22-23, col.7, lines 56-58, col.9, lines 60-66, col.12, line 10, col.14, lines 12, 16-17, and 40).

It is noted that there is no disclosure in Fujii et al. that the method is for “printing a mark on a surface of a golf ball”. However, the recitation in the claims that the method is “suitable for” printing a mark on a surface of a golf ball is merely an intended use. Applicants attention is drawn to MPEP 2111.02 which states that intended use statements must be evaluated to determine whether the intended use results in a structural difference between the claimed invention and the prior art. Only if such structural difference exists, does the recitation serve to

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limit the claim. If the prior art structure is capable of performing the intended use, then it meets the claim.

It is the Examiner's position that the intended use recited in the present claims does not result in a structural difference between the presently claimed invention and the prior art and further that the prior art structure is capable of performing the intended use. Given that Fujii et al. disclose method comprising a printing process using an ink wherein the ink is identical to that presently claimed, it is clear that the method of Fujii et al. would be capable of performing the intended use, i.e. printing a mark on a surface of a golf ball, presently claimed as required in the above cited portion of the MPEP.

In light of the above, it is clear that Fujii et al. anticipate the present claims.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fujii et al. (U.S. 5,929,140).

The disclosure with respect to Fujii et al. in paragraph 2 above is incorporated here by reference.

The difference between Fujii et al. and the present claimed invention is the requirement in the claims of the viscosity of the ink.

Fujii et al. disclose that the resin having a hydroxyl group is in the form of an emulsion and that the resin emulsion has viscosity of 2500-9700 cP (Table 4, col.27). Further, col.14, lines 35-37 of Fujii et al. disclose that the ink can be diluted with solvent and then printed. However, there is no explicit disclosure of the viscosity of the ink.

However, it would have been within the skill level of one of ordinary skill in the art to recognize that if the viscosity of the ink is too high, the ink will not print effectively or function in the printing apparatus while if the viscosity is too low, the ink will not adhere to the page properly.

In light of the above, it therefore would have been obvious to one of ordinary skill in the art to produce ink with viscosity, including that presently claimed, in order to produce ink that is effectively and correctly printed from the printing apparatus and that adheres to the substrate, and thereby arrive at the claimed invention.

5. Claims 1-5 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Isogawa (U.S. 6,551,395) in view of Uraki et al. (U.S. 5,972,087).

Isogawa disclose method of printing a mark on a surface of a golf ball comprising a printing process using an ink comprising a resin having an hydroxyl group, an isocyanate, and coloring agent containing a metal such as phthalocyanine blue, metal powder, silica, etc. The ink is printed on the golf ball by pad printing technique wherein the ink is applied to a pad so that the pattern of the mark is formed on the pad with the ink and then pressing the pad against the surface of the golf ball in order to transfer the forming the pattern of the mark to the golf ball (col. 2, lines 58-61, col.3, line 28-29, col.4, lines 47-48, 52, and 53-54, and col.6, lines 15-29).

The difference between Isogawa and the present claimed invention is the requirement in the Isogawa of β -diketone.

Uraki et al., which is drawn to ink composition, disclose the use of β -diketone chelating agent such as acetylacetone which functions by capturing metallic ions associated with the coloring agent, in order to produce ink with excellent clearness, storage stability, and discharge stability (col.4, lines 10-20,27, and 44-50).

In light of the motivation for using β -diketone disclosed by Uraki et al. as described above, it therefore would have been obvious to one of ordinary skill in the art to use such β -diketone in the ink of Isogawa in order to produce ink with excellent clearness, storage stability, and discharge stability, and thereby arrive at the claimed invention.

6. **NOTE:** As set forth in amended 35 USC 103(c), subject matter which qualifies as prior art under one or more subsections (e), (f), and (g) of section 102 cannot be applied against the claimed invention if the prior art and the claimed invention “were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.” This rule change to 103(c) applies to any patent application filed on or after November 29, 1999. See Official Gazette, April 11, 2000. As noted in the Official Gazette, the “mere filing of a continuation application on or after November 29, 1999 will serve to exclude commonly owned 102(e) prior art that was applied, or could have been applied, in a rejection under 103 in the parent application.”

Given that the filing date of the present application is subsequent to November 29, 1999, applicant is advised that a statement indicating that Isogawa (U.S. 6,551,395) was commonly owned at the time the present invention was made will be required to remove the rejection under 35 USC 103. See the Official Gazette Notice of April 11, 2000, 1233 OG 54.

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Ohira et al. (U.S. 6,180,714) disclose paint for golf ball which comprises β -diketone, resin having hydroxyl group, isocyanate, and pigment, however, there is no disclosure of ink or method comprising a printing process using the ink as required in the present claims.

Tamai et al. (U.S. 6,383,648) disclose method of coating an article wherein the coating comprises acrylic resin, acetylacetone solvent, phthalocyanine pigment, and isocyanate.

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Tucker et al. (U.S. 2003/0119943) disclose ink jet ink comprising resin having hydroxyl group, colorant containing a metal, and isocyanate, however, there is no disclosure or suggestion of β -diketone as required in the present claims.

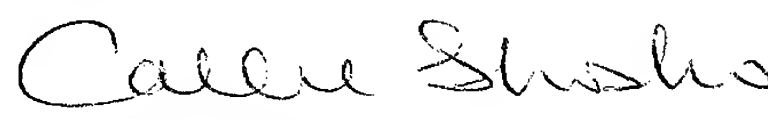
Okido et al. (U.S. 2003/0027663) disclose method of printing a mark on a surface of a golf ball comprising a printing process using an ink comprising isocyanate, resin having hydroxyl group, colorant containing a metal, and acetylacetone chelating agent. However, given the effective filing date of the reference, the reference is not applicable against the present claims under any subsection of 35 USC 102.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Callie E. Shosho whose telephone number is 703-305-0208. The examiner can normally be reached on Monday-Friday (6:30-4:00) Alternate Fridays Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 703-306-2777. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

CS
July 18, 2003


Callie E. Shosho
Primary Examiner
Art Unit 1714